



Introduction to ISO/IEC JTC 1/SC 31/WG 8

BILL HOFFMAN | HOFFMAN SYSTEMS LLC, representing AIAG
p: 248.393.2700
e: bill@hoffmansystemsllc.com

Convenor – Jeanne Duckett

AIDC application standards supply guidance on how to combine technology standards with data structures standards and include quality assessment suitable for global applications of AIDC.

Just a technology standard - like for a bar code symbol or for an RFID tag - would not be sufficient to build a running AIDC application.

Accordingly, WG8 projects are built from modules of other technology WGs, like WG1 (Data carrier), WG2 (Data and structure) and WG4 (Radio communications), completing it with expertise from the committee and using standard modules from other ISO and/or IEC committees – where applicable.

Application of AIDC standards

WG 8 Convenor: Jeanne Duckett

- Assist other standards committees in applying AIDC standards
- Develop AIDC application standards
- External focal point for SC 31 work.

ISO/IEC JTC SC 31 has published more than 100 international standards in the AIDC area, which address bar code symbologies (how a bar code is created and read), RFID air interface protocol (how an RFID tag is communicated with), real-time locating systems (RTLS), as well as unique identification and data content.

Currently, four RFID application standards are under revision. They were taken over from ISO TC 122 Packaging:

- > ISO/IEC WD 17367 *Supply chain applications of RFID — Product tagging*
- > ISO/IEC WD 17366 *Supply chain applications of RFID — Product packaging*
- > ISO/IEC WD 17365 *Supply chain applications of RFID — Transport units*
- > ISO/IEC WD 17364 *Supply chain applications of RFID — Returnable transport items (RTIs) and returnable packaging items (RPIs).*

Other WG 8 Projects

- > ISO/IEC 22603 Digital representation of product information
- > ISO/NP 8506 AIDC Application in Industrial Construction
- > New Work Item Proposed - Internet of Clothes



THE ISO/IEC 1736X SERIES OF INTERNATIONAL STANDARDS

BILL HOFFMAN | HOFFMAN SYSTEMS LLC, representing AIAG
p: 248.393.2700
e: bill@hoffmansystemsllc.com

What will be discussed

- > **WHAT** are these documents, why are they important, and what's next.
- > **WHY** is it important to merge these documents.
- > **HOW** to do it.
- > **SUMMATION** of the important points.

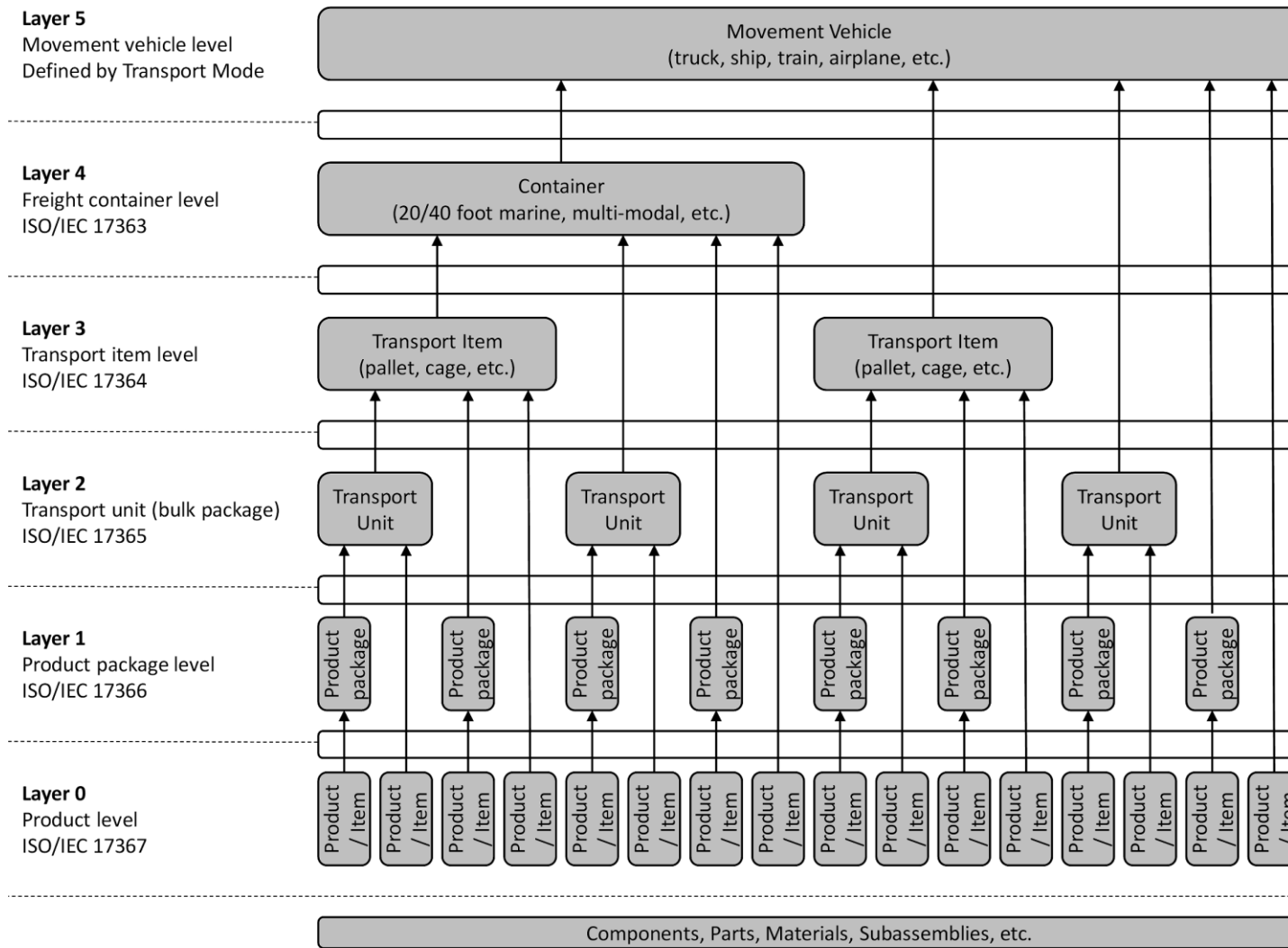
WHAT ARE THESE DOCUMENTS?

The ISO/IEC 1736x series of documents cover supply chain applications of RFID in various modalities. They were one of the first international standards defining identification schemas using RFID and barcodes. These standards are critical to the automotive world, as well as various other business sectors.

- ISO 17363 is now the responsibility of TC 204/WG 7 and is not part of this discussion. (Covers ships, big trucks, etc.)
- ISO/IEC 17364, *Supply chain applications of RFID – Returnable Transport Units (RPIs) and Returnable Packaging Items (RPIs)*
- ISO/IEC 17365, *Supply chain applications of RFID – Transport Units*
- ISO/IEC 17366, *Supply chain applications of RFID – Product Packaging*
- ISO/IEC 17367, *Supply chain applications of RFID – Product tagging*

These documents were issued as ISO-only documents, first released in 2009. They were reviewed and updated in 2013, reviewed and updated to ISO/IEC in 2019, and now with a major update in 2021 (adding 8-bit and binary encoding, streamlining data handling across all documents. This also includes potentially merging all into one document).

WHAT, Pt 2



WORKGROUP 8
STANDARDS
SUPPORT

SUSTAINABLE
DEVELOPMENT
GOALS



WHY MERGE THESE DOCUMENTS?

The plan has been to use 17367 as the “template” on which all of the changes are made/balloted/corrected. Then those accepted changes are applied to the other 3 documents.

Currently, ISO/IEC 17367 has completed its first DIS ballot. A CRM is to be held, with a 2nd DIS ballot following.

ISO/IEC 17364 thru 17366 have completed their CD ballots/CRM and await recommendation for DIS ballot.

During the update process, it was found that all documents – once updated - had the same data-handling content. With data being the largest part of the documents, it was agreed to integrate all into one document after publishing them individually.

ISO procedures requires that documents do not duplicate content from one document to another – that they reference a document instead. In exploring the impact of referencing one document re data handling, it was found that there is very little unique data left in any one document.

Using 17367 as the first/template document, the lead-time on the other 3 lag by at least one procedure step. Each of the documents must be treated individually; procedure-wise and work-wise.

Lead-time for CD ballot = 8 weeks (could be 12 or 16). DIS ballot = 12 weeks. FDIS = 12-week preparation, then 8-week ballot. Publish = 6 weeks after FDIS approval.

If these documents are integrated into one document, the integrated document could be introduced at the DIS level.

This has the potential of reducing the lead-time to publishing by at least 8 weeks. It could be much more.

There would also be a SIGNIFICANT reduction in labor involved by the members of WG 8 and ISO.

HOW TO INTEGRATE THESE DOCUMENTS

WG 8 would need to recommend that a New Work Item Proposal (NWIP) be created to integrate ISO/IEC 17364, 17365, 17366 and 17367.

The lead-time for an NWIP ballot is 8 weeks (ISO Directives Pt 1, 2.3.4).

Once the NWIP has been approved, WG 8 would need to recommend that an integrated document be submitted for DIS ballot (lead-time = 12 weeks. ISO Directives Pt 1, 2.6.1).

The rest of the standard ISO approval process would proceed.

SUMMATION

- Current process for this major change is to update each document individually, with 17367 being the first/template document.
 - The things learned on modifying 17367 are applied to 17364, 17365 and 17366.
- The creation of an NWIP is required to integrate the four documents into one.
- Pros
 - Considerable reduction in time-to-publish and manpower required to complete the tasks.
 - WG 8 reached consensus (in 2020) to create one document, with specific details (clauses within the document) on the different types of product covered.
- Cons
 - If the documents are kept separate, three of the documents will need the data-handling information removed from them, and a reference to the one that has this information inserted.
 - Longer lead-time to publish all of them.
 - Considerably more labor to complete the tasks.

THANK YOU!

BILL HOFFMAN | HOFFMAN SYSTEMS LLC,
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ISO/IEC JTC 1/SC 31/WG8 Application of AIDC standards